

Maternal and health system factors influencing intention to obtain Early Infant Diagnosis at 6 weeks among HIV infected mothers

Witness Chirinda – on behalf of SAPMTCTE Team
Health systems Research Unit, SAMRC

Best Practices and Innovations in Paediatric HIV and TB Care and Treatment Meeting
November 2-3, 2017 Pretoria, South Africa



BACKGROUND

- Early infant diagnosis (EID) of HIV infection is essential for ensuring timely ART initiation and reducing morbidity and mortality among HIV-infected children
- SA EID guidelines have evolved:
 - 2004 routine HIV PCR test of HIV exposed infants (HEI) at 6wks
 - 2015:
 - routine birth testing for HEI +
 - testing at 10 weeks, 16-18 weeks, 6-weeks post breastfeeding cessation and 18 months
- EID coverage is still low in most sub-Saharan African countries
- Missed opportunities for EID have been reported
- Maternal intention to obtain EID is an important measure of compliance with follow-up and retention

AIM

To evaluate patterns, and maternal and health system factors associated with intention to obtain EID at the 6 week visit

METHODS

Design

- Secondary data from 3 cross-sectional facility-based national PMTCT surveys in 2010, 2011-12, and 2012-13
- Multistage probability proportional to size sampling.
- 580 facilities per survey randomly selected to yield the desired sample size^{1,2}
- Mother/caregiver pairs enrolled during 6wk postpartum **immunization visit**

Analysis

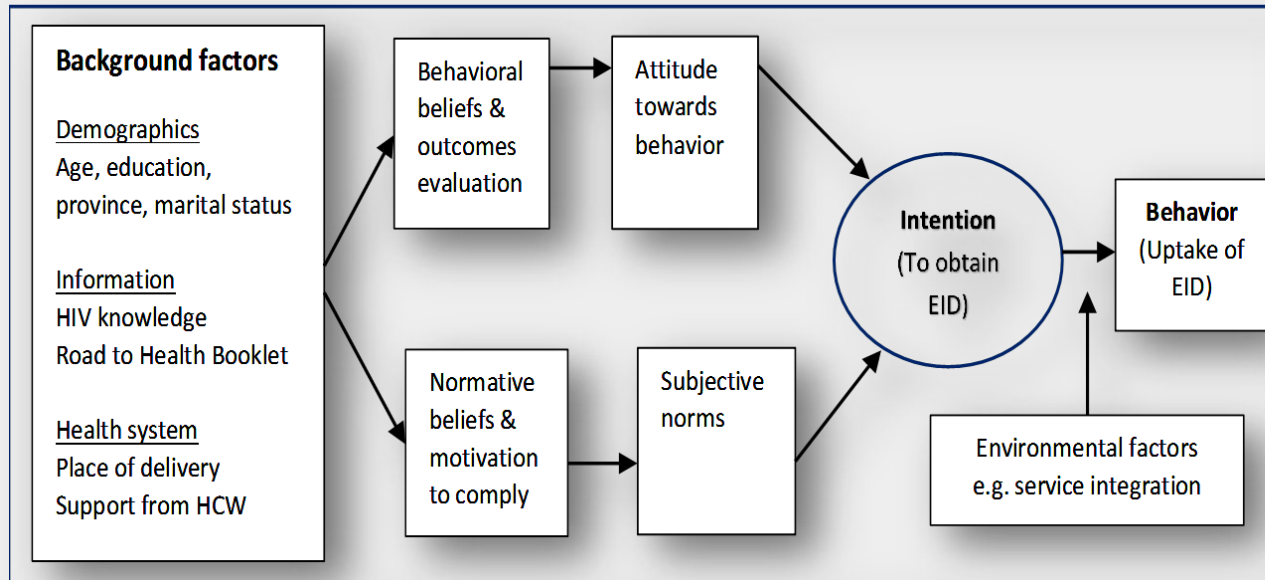
- Outcome – **intention to obtain EID**, based on responses to the question (non-exclusive):
 - “*why did you bring this child to the clinic today?*”...
 - 1 “immunization” 2 “**HIV test**” and 3 “other reasons”
 - Response category **2** was considered as intention to obtain EID at the 6 weeks visit
- Analysis restricted to mothers with self-reported **HIV+** status
- Multivariable logistic regression model used to estimate factors associated with outcome

¹Goga A, E., et al . 2016. Journal of Global Health.

²Goga, A. E., et al. 2014. J epidemiology and community health

METHODS

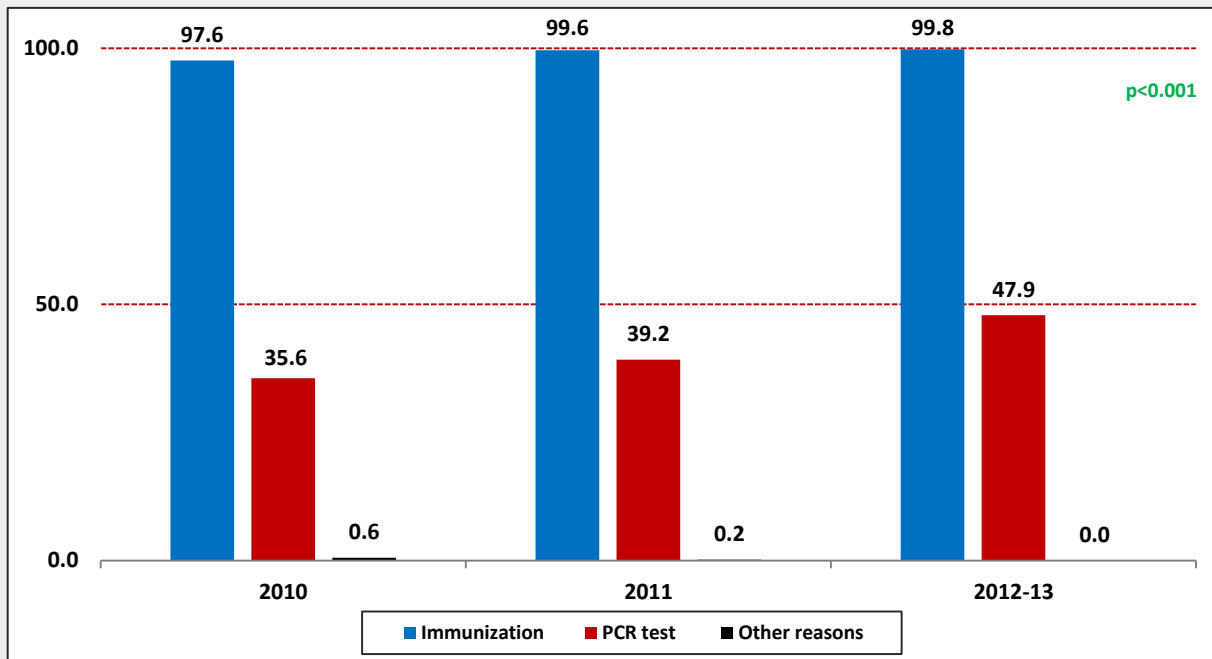
Framework: Theory of Planned Behavior (TPB)*



*adapted from: Ajzen, I., *From intentions to actions: A theory of planned behavior*, in *Action control*. 1985, Springer. p. 11-39.

RESULTS

Reasons for bringing the child at the 6wk visit, among HIV+ mothers



8044 (28.8%) HIV+ mothers:

2010 – 2690 (28.2%)

2011/12 – 2557 (27.6%)

2012/13 – 2797 (30.4%)

Mean age: 26.04 years (SD: 6.3)

Education: 77.4% high school

Marital status: 78.4% single

Place of delivery: 78.8% hospital

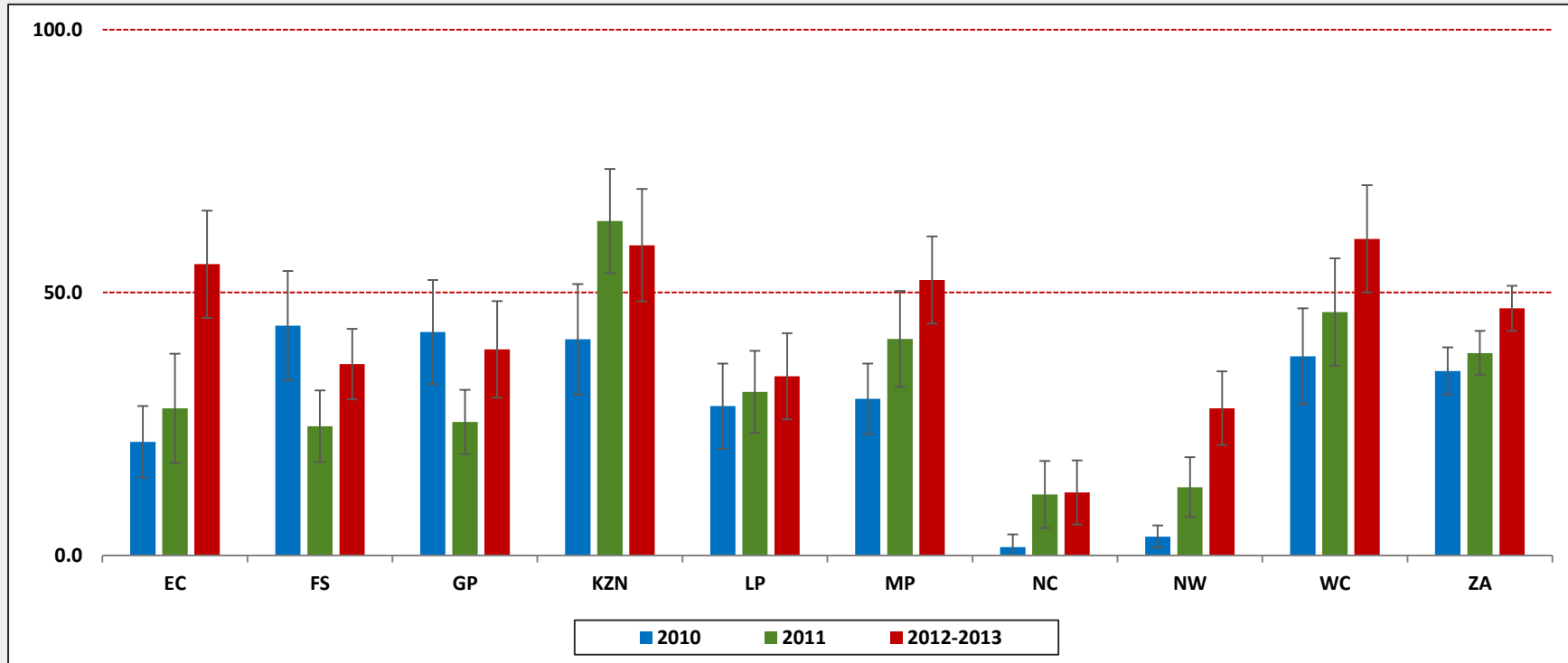
Disclosed HIV status: 85.5%

Knows modes of MTCT : 59.5%

RtHB – maternal HIV recorded: 57.8%

RtHB – infant prophylaxis recorded: 57.7%

Proportion of HIV+ mothers who intentionally brought child to receive EID at 6-week immunization visit, stratified by year and province



Factors associated with mother's intention to request EID service at 6-week immunization visit among HIV+ mothers

Selected characteristics*	Adjusted OR (95%CI)
Correct knowledge of MTCT modes (ref=No)	
Yes	1.37 (1.13-1.65)
Place of delivery (ref=hospital)	
Home	0.75 (0.56-1.00)
Clinic	1.22 (1.04-1.43)
Received support from CHW (ref=No)	
Yes	0.81 (0.71-0.92)
Infant PMTCT Prophylaxis Recorded in RTHB (ref=No)	
Yes	1.51 (1.33-1.73)
Survey year (ref=2010)	
2011	0.89 (0.76-1.03)
2012	1.59 (1.37-1.84)

*adjusted for maternal education, age, province and year
significant factors in red

CONCLUSIONS

- The increase in intention to obtain EID during immunization visits is very positive
 - suggests improvements in the integration between routine MCH services and HIV-related care
 - However, the proportion was still below half (50%)
- **Best practices** identified that could be reinforced across provinces:
 - *Improving maternal HIV knowledge, and*
 - *optimizing use of RthB through documenting infant PMTCT prophylaxis*
 - This is especially important in the context of new SA guidelines for EID, which recommend EID at birth, 10 weeks, 6 weeks post-breastfeeding cessation and at the 18-month immunization visit.

ACKNOWLEDGMENTS

MRC SAPMTCTE Team:

- Ameena Goga
- Carl Lombard
- Nobuntu Noveve
- Vundli Ramokolo
- Tanya Doherty
- Yages Singh
- Nobubelo Ngandu
- Vuyolwethu Magasana
- Trisha Ramraj
- Duduzile Nsibande
- Natasha Titus
- Jazelle Kiewitz
- Lucille Heyns

Survey supervisors

The SAPMTCTE was supported by:

The President's Emergency Plan for AIDS Relief (PEPFAR) through the Centers for Disease Control and Prevention (CDC)

NDoH

NICD/NHLS

SANAC

Global Fund

EU (through NDoH)

SAMRC



Caregiver-infant pairs Research nurses NDoH Nurses

CDC:

- Thu-Ha Dinh
- Mireille Cheyip
- Mary Mogashoa

NDoH:

- Yogan Pillay

Provincial DoHs

UWC/ UNICEF NY:

- Debra Jackson

UNICEF (SA)

- Sanjana Bhardwai

NICD/NHLS:

- Adrian Puren
- Gayle Sherman
- Beverley Singh
- Ushmita Patel
- Ewalde Cutler

Contact details : Witness Chirinda

UNIT : Health Systems Research Unit

E-MAIL : Witness.Chirinda@mrc.ac.za